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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ganesh Basawapatna

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SANTA MONICA, CA 90404

EXAMINER

HOSSAIN, FARZANA E

ART UNIT

PAPER NUMBER

2623

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/781,122	Applicant(s) BASAWAPATNA ET AL.	
	Examiner FARZANA E. HOSSAIN	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because Figures 1 and 6 should include labels and reference numerals for system components (currently blocks with reference numerals). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Cable Distribution System with Service Modules Providing Selected Video Channels.

Claim Objections

3. Claim 22 is objected to because of the following informalities:

Claim 22 recites, "the interface units are arranged in a home run relationship with respect to their respective service modules." There is no definition in the specification about a home run relationship. Based on the specification, a home run relationship is interpreted to be service modules interfaced with subscriber units in an apartment building.

Appropriate correction is required.

4. Claims 25-27, 32, 36, 38 and 40 are objected to because of the following informalities:

Claims 25, 32 and 36 recite, "a regional headend." Please point to the section of the specification with this limitation.

Claims 26 and 38 recite "cabling running between each service module and the plurality of interface modules associated therewith, the cabling being bandwidth limited

so as to not efficiently carry signals appreciably above 350 MHz.” Please point to the section of the specification with this limitation.

Claims 27 and 40 recite, “cabling running between the headend and each of the plurality of service modules associated therewith, the cabling having sufficient bandwidth capacity to be able to efficiently carry signals as high as 750 MHz.” Please point to the section of the specification with this limitation.

If these limitations are new limitations not in the specification, the claim limitations will not have a priority of September 8, 1999 and will become need to have status of “continuation in part” instead of “continuation.”

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 21, 31 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitamura et al (US 6,188,871 and hereafter referred to as “Kitamura”).

Regarding Claim 21, Kitamura discloses a cable distribution system, comprising: a headend receptive of signals from a plurality of video sources (Figure 3, 101, Figure 2,

Column 6, lines 56-67, Column 7, lines 1-3), selected ones of the signals being multiplexed together to create one or more multiplexed channel signals (Figure 3, 101, Figure 2, Column 6, lines 56-67, Column 7, lines 1-3, Figure 3, 102);

A plurality of service modules associated with the headend (Figure 3, 104, Column 1, lines 35-47), each service module receiving one or more of the multiplexed channel signals and providing it to each of a plurality of receiver/decoders or converters within each service module that each receive/decode a selected video channel (Column 7, lines 16-34, Figure 3) and provide the video channel at a selected output frequency unrelated to the conventional cable frequency normally associated with the selected video channel, each video channel received/decoded by a given service module being sent to the interface unit corresponding to that receiver/decoder (Column 2, lines 22-47); and

A plurality of interface units associated with each service module (Figure 2, Figure 3, 117), each interface unit being located at a customer location, each interface unit receptive of the video channel and providing same to a video displaying apparatus (Figure 2, Figure 3, 117).

Regarding Claims 31 and 34, Kitamura discloses a cable distribution system, comprising: a headend receptive of signals from a plurality of video sources (Figure 3, 101, Figure 2, Column 6, lines 56-67, Column 7, lines 1-3), selected ones of the signals being multiplexed together to create one or more multiplexed channel signals (Figure 3, 101, Figure 2, Column 6, lines 56-67, Column 7, lines 1-3, Figure 3, 102); a plurality of service modules associated with the headend (Figure 3, 104, Column 1, lines 35-47),

each service module receiving one or more of the multiplexed channel signals and providing it to each of a plurality of receiver/decoders or converters within each service module that each receive/decode a selected video channel (Column 7, lines 16-34, Figure 3) and provide the video channel at a predetermined or selected output frequency unrelated to the conventional cable frequency normally associated with the selected video channel, each video channel received/decoded by a given service module being sent to the interface unit corresponding to that receiver/decoder (Column 2, lines 22-47); the predetermined output frequency of each receiver/decoder in a given service module being different from each other, each of the video channels received/decoded by a given service module being combined together into a single signal (Figure 11, Column 1, lines 65-67, Column 2, lines 1-7, 22-47); and a plurality of interface units associated with each service module (Figure 2, Figure 3, 117), each interface unit being located at a customer location (Figure 2, Figure 3, 117), each interface unit associated with the service module being receptive of the single signal from the service module, each interface unit providing only one of the video channels in the single signal to a video displaying apparatus (Figure 2, Figure 3, 117, Column 10, lines 30-40).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 21, 22, 24, 28-31, 34, 35 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoel et al (US 5,905,942 and hereafter referred to as "Stoel") in view of Kitamura.

Regarding Claims 21, 31 and 34, Stoel discloses a headend receptive of signals from a plurality of video sources (Figure 1, 12, Figure 3A, 86, 92), selected ones of the signals being multiplexed together to create one or more multiplexed channel signals (Figure 3B, 96); a plurality of service modules associated with the headend (Figure 1, 28), each service module receiving one or more of the multiplexed channel signals (Figure 1, 28); a plurality of interface units associated with each service module (Figure 1, 18), each interface unit being located at a customer location, each interface unit receptive of the video channel and providing same to a video displaying apparatus (Figure 1, 18, Column 1, lines 64-67, Column 2, lines 1-23, Figure 2, 44). Stoel discloses a service module providing signals to a receiver/decoder or receiver/de-interdictor a selected video channel and provide the video channel that is determined by the headend via control signals sent to the interdiction field unit, each video channel received/decoded or de-interdicted by the given service module or interdiction field unit being sent to the interface unit (Column 4, lines 45-55, Column 5, lines 10-20). Stoel is silent on a service module providing each of a plurality of receiver/decoders within each service module that each receive/decode a selected video channel and provide the video channel at a selected output frequency unrelated to the conventional cable frequency normally associated with the selected video channel, each video channel

received/decoded by a given service module being sent to the interface unit corresponding to that receiver/decoder. Stoel does not explicitly disclose each interface unit associated with the service module being receptive of the single signal from the service module, each interface unit proving only one of the video channels in the single signal to a video displaying apparatus (Figure 2, Figure 3, 117, Column 10, lines 30-40). In analogous art, Kitamura discloses a plurality of service modules associated with the headend (Figure 3, 104, Column 1, lines 35-47), each service module receiving one or more of the multiplexed channel signals and providing it to each of a plurality of receiver/decoders or converters within each service module that each receive/decode a selected video channel (Column 7, lines 16-34, Figure 3) and provide the video channel at a selected output frequency unrelated to the conventional cable frequency normally associated with the selected video channel, each video channel received/decoded by a given service module being sent to the interface unit corresponding to that receiver/decoder (Column 2, lines 22-47); and a plurality of interface units associated with each service module (Figure 2, Figure 3, 117), each interface unit being located at a customer location (Figure 2, Figure 3, 117), each interface unit associated with the service module being receptive of the single signal from the service module, each interface unit proving only one of the video channels in the single signal to a video displaying apparatus (Figure 2, Figure 3, 117, Column 10, lines 30-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitamura to include each service module receiving one or more of the multiplexed channel signals and providing it to each of a plurality of receiver/decoders

or converters within each service module that each receive/decode a selected video channel (Column 7, lines 16-34, Figure 3) and provide the video channel at a selected output frequency unrelated to the conventional cable frequency normally associated with the selected video channel, each video channel received/decoded by a given service module being sent to the interface unit corresponding to that receiver/decoder (Column 2, lines 22-47); each interface unit associated with the service module being receptive of the single signal from the service module, each interface unit providing only one of the video channels in the single signal to a video displaying apparatus (Figure 2, Figure 3, 117, Column 10, lines 30-40) as taught by Kitamura in order to provide a system which allows a subscriber in a home to enjoy CATV on two different TV sets installed in different rooms (Column 1, lines 56-64) as disclosed by Kitamura.

Regarding Claim 22, Stoel and Kitamura disclose all the limitations of Claim 21. Stoel discloses the interface units are arranged in a home run relationship with respect to their service modules (Figure 1).

Regarding Claims 24 and 35, Stoel and Kitamura disclose all the limitations of Claims 21 and 34 respectively. Stoel discloses a headend is a local headend located in a building or set of buildings where the customer locations are (Figure 1, 12).

Regarding Claims 28 and 41, Stoel and Kitamura disclose all the limitations of Claims 21 and 34 respectively. Kitamura discloses that service modules include frequency converters (Figure 3) and that the service module distributes frequencies to subscribers lines in the service module or regional common block (Figure 11), the service module includes a frequency converter to signals to a predetermined frequency

(Column 2, lines 35-45), and each interface unit does not include a frequency converter (Figure 12).

Regarding Claim 29 and 42, Stoel and Kitamura disclose all the limitations of Claims 21 and 34 respectively. Kitamura discloses that each service module utilizes the same predetermined frequencies as each other service module as the service modules or regional common blocks can be connected in parallel so that a subscriber belonging to one service module can be accepted by another service module so that a subscriber can provide the user with the requested service based on a predetermined vacant channel (Column 11, lines 15-54).

Regarding Claim 30 and 43, Stoel and Kitamura disclose all the limitations of Claims 21 and 34 respectively. Stoel discloses each interface unit passes information back upstream to its associated service module that includes channel selection information for interactive sessions including (Column 3, lines 45-55, Column 4, lines 46-67, Column 5, lines 1-26).

9. Claims 23, 27, 37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoel in view of Kitamura as applied to claims 21 and 35 above, and further in view of Farber et al (US 6,486,907 and hereafter referred to as "Farber").

Regarding Claim 23, Stoel and Kitamura disclose all the limitations of Claim 21. Kitamura discloses that the selected output frequency of each receiver/decoder in a given service module is different from each (Figure 11, Column 1, lines 65-67, Column 2, lines 1-7, 22-47), each of the video channels received/decoded by a given service

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module being combined together into a single signal and further wherein each interface unit is receptive of the single signal and from the service module (Figure 11, Column 1, lines 65-67, Column 2, lines 1-7, 22-47), the interface unit providing only a selected one of the video channels in the single signal to the video displaying apparatus (Figure 2, Figure 3, 117, Column 10, lines 30-40). Stoel and Kitamura are silent on interface units arranged in a loop through relationship with respect to their respective service modules. Farber discloses interface units are arranged in a loop through relationship with respect to their service modules (Figure 1, Figure 2, 46, 54, and 58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include interface units are arranged in a loop through relationship with respect to their service modules (Figure 1, Figure 2, 46, 54, 58) as taught by Farber in order to improve of the performance of distribution of satellite signals in an apartment building outputting in a single cable (Column 1, lines 32-44, 66-67, Column 2, lines 1-9) as disclosed by Farber.

Regarding Claims 27 and 40, Stoel and Kitamura disclose all the limitations of Claims 21 and 34 respectively. Stoel and Kitamura are silent on cabling running between the headend and each of the plurality of service modules associated therewith, the cabling having sufficient bandwidth capacity to be able to efficiently carry signals as high as 750 MHz. Farber discloses cabling running between the headend and each of the plurality of service modules associated therewith, the cabling having sufficient bandwidth capacity to be able to efficiently carry signals as high as 750 MHz (Column 6, lines 24-40). Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify the combination to include cabling running between the headend and each of the plurality of service modules associated therewith, the cabling having sufficient bandwidth capacity to be able to efficiently carry signals as high as 750 MHz (Column 6, lines 24-40) as taught by Hoarty in order to improve of the performance of distribution of satellite signals in an apartment building outputting in a single cable (Column 1, lines 32-44, 66-67, Column 2, lines 1-9) as disclosed by Farber.

Regarding Claim 37, Stoel and Kitamura disclose all the limitations of Claim 35. Stoel discloses that service modules are dispersed throughout the building or set of buildings (Figure 1, 28, 18A-D). Stoel and Kitamura are silent on at least one service module for each floor of the building or set of buildings. Farber discloses at least one service module for each floor of the building or set of buildings (Figure 2, 46, 54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include at least one service module for each floor of the building or set of buildings (Figure 2, 46, 54) as taught by Hoarty in order to improve of the performance of distribution of satellite signals in an apartment building outputting in a single cable (Column 1, lines 32-44, 66-67, Column 2, lines 1-9) as disclosed by Farber.

10. Claims 25, 32 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoel in view of Kitamura as applied to claims 24, 31 and 35 above, and further in view of Hoarty et al (US 2005/0114906 and hereafter referred to as "Hoarty").

Regarding Claims 25, 32 and 36, Stoel and Kitamura disclose all the limitations of Claims 24, 31 and 35 respectively. Stoel discloses that the headend is a local headend located in a building or set of buildings where the customer locations are (Figure 1, 12). Stoel and Kitamura are silent on regional headend that is remote from the building or the set of buildings, the regional headend providing video channels at selected frequencies to the local headend. Hoarty discloses a local headend (Figure 1, 11) and regional headend remote from the local headend (Figure 1, 15), the regional headend providing video channels at selected frequencies to the local headend (Figure 1, Page 3, paragraph 0046, Page 8, paragraphs 0054, 0057). It is necessarily included that if the regional headend is remote from the local headend, it remote from the building or set of buildings. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include regional headend remote from the local headend (Figure 1, 15), the regional headend providing video channels at selected frequencies to the local headend (Figure 1, Page 3, paragraph 0046, Page 8, paragraphs 0054, 0057) as taught by Hoarty in order to provide an improved system to handle switching and computing demands to provide separate and private information services simultaneously (Page 1, paragraph 0006, Page 3, paragraph 0046) as disclosed by Hoarty.

11. Claims 26, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoel in view of Kitamura as applied to claims 24, 31 and 35 above, and further in view of Ahmad (US 5,565,908).

Regarding Claims 26 and 38, Stoel and Kitamura disclose all the limitations of Claims 21 and 34 respectively. Stoel is silent on cabling running between each service module and the plurality of interface modules associated therewith, the cabling being bandwidth limited so as to not efficiently carry signals appreciably above 350 MHz. Ahmad discloses cabling running between each service module and the plurality of interface modules associated therewith, the cabling being bandwidth limited so as to not efficiently carry signals appreciably above 350 MHz (Column 7, lines 56-67, Column 8, lines 1-2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include cabling running between each service module and the plurality of interface modules associated therewith, the cabling being bandwidth limited so as to not efficiently carry signals appreciably above 350 MHz (Column 7, lines 56-67, Column 8, lines 1-2) as taught by Ahmad in order to provide a system in a building that sets the maximum amount of channels (Column 7, lines 56-67, Column 8, lines 1-2) as disclosed by Ahmad.

Regarding Claim 39, Stoel, Kitamura and Ahmad disclose all the limitations of Claim 38. Ahmad discloses coaxial cabling (Column 7, lines 56-67) and it is inherent that coaxial cable is metallic in order to electrically conduct a signal.

12. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoel in view of Kitamura as applied to claims 31 above, and further in view of Granger (US 5,483,277).

Regarding Claim 33, Stoel and Kitamura disclose all the limitations of Claim 31. Stoel and Kitamura are silent on including a separate fixed frequency bandpass filter located at each customer location for each interface unit, the bandpass filter substantially preventing video channels other than the selected video channel associated with that interface unit to pass through to the interface unit. Granger discloses a separate fixed frequency bandpass filter located at each customer location for each interface unit, the bandpass filter substantially preventing video channels other than the selected video channel associated with that interface unit to pass through to the interface unit (Column 6, lines 42-56, Column 7, lines 43-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include a separate fixed frequency bandpass filter located at each customer location for each interface unit, the bandpass filter substantially preventing video channels other than the selected video channel associated with that interface unit to pass through to the interface unit (Column 6, lines 42-56, Column 7, lines 43-55) as taught by Granger in order to be connect to only requested TV channels and a VCR channel (Column 1, lines 53-67, Column 2, lines 1-10) as disclosed by Granger.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA E. HOSSAIN whose telephone number is (571)272-5943. The examiner can normally be reached on Monday to Friday 7:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
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FEH
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